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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,636	09/29/2003	Gary Vacon	160-007	1124

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EXAMINER	
NGUYEN, KHAI MINH	

ART UNIT	PAPER NUMBER
2617	

DATE MAILED: 09/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/673,636	VACON ET AL.	
	Examiner	Art Unit	
	Khai M. Nguyen	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 August 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *2,7,9,14,16 and 21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *2,7,9,14,16, and 21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 8/2/2006 have been fully considered but they are not persuasive.

Regarding the Jasewski reference, applicant states that Jasewski does not suggest an indicator operable to provide an external indication of the signal strength directly from the first access point to a human being, the indication being perceivable by the human being and also being indicative of the signal strength of the second access point.

In contrast to applicant's assertions, the examiner directs the applicant to the Jasewski et al. (U.S.Pat-5933420). Jasewski et al. (U.S.Pat-5933420) clear disclose "an indicator operable to provide an external indication of the signal strength directly from the first access point to a human being (fig.3-4, col.6, line 63 to col.7, line 8, and col.9, line 60 to col.10, line 13, detected signal strength corresponds to the received signal strength of the a first message from a first access point to a second access point and the received signal strength of a second message from the second access point to the first access point, and the graphical user interface shows the physical locations of the access points), the indication being perceivable by the human being (fig.4, col.9, line 60 to col.10, line 13, the graphical user interface shows the physical locations of the access points) and also being indicative of the signal strength of the second access point (fig.3-4, col.6, line 63 to col.7, line 8, and col.9, line 60 to col.10, line 13, detected signal strength corresponds to the received signal strength of the a first message from a first

access point to a second access point and the received signal strength of a second message from the second access point to the first access point, and the graphical user interface shows the physical locations of the access points)."

Regarding the Halasz reference, applicant states that Halasz does not suggest logic for reducing transmission power.

In contrast to applicant's assertions, the examiner directs the applicant to the Halasz (U.S.Pat-6732163). Halasz (U.S.Pat-6732163) clear disclose "logic for reducing transmission power (fig.3-4, col.8, line 45 to col.9, line 48, col.10, lines 39-54, the signal strength is evaluated to determine which base units are in closest range. The frequency of the base unit which has the weakest signal strength is favored for selection of the operating frequency of the newly added base unit. Next, the load associated with each existing base unit may be considered. The frequency in use by a base unit having a high load would be disfavored. It should be appreciated that one or more of the foregoing communication parameters may be considered in selecting the operating frequency of the newly added base station)."

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 2, 9 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Jaszewski et al. (U.S.Pat-5933420).

Regarding claim 2, Jaszewski teaches a first access point operable to provide wireless network access to client devices coupled to a wireless network (fig.1-4, access point 1, abstract), the first access point comprising:

a receiver operable to detect a signal from a second access point (fig.1-2, col.3, line 59 to col.4, line 25), distinguish that signal from other signals (fig.1-2, col.6, lines 30-45), and measure strength of the signal (fig.1-4, col.6, lines 30-45, col.6, line 63 to col.7, line 8, claim 1); and

an indicator operable to provide an external indication of the strength directly form the first access point to a human being (fig.3-4, col.6, line 63 to col.7, line 8, and col.9, line 60 to col.10, line 13), the indication being perceivable by the human being (fig.3-4, col.9, line 60 to col.10, line 13) and also being indicative of the signal strength of the second access point (fig.3-4, col.6, line 63 to col.7, line 8, and col.9, line 60 to col.10, line 13);

whereby proximity of the second access point (fig.3) relative to the first access point can be estimated by the human directly from reference to the first access point without knowing the precise geographic location of the second access point (fig.3-4, col.6, line 63 to col.7, line 8, and col.9, line 60 to col.10, line 13).

Regarding claim 9, Jaszewski teaches a method executed by the first access point for facilitating deployment of the first access point (fig.1-4, access point 1-4, abstract) comprising the steps of:

receiving a plurality of signals (fig.1-2, col.2, lines 23-42, col.3, line 59 to col.4, line 25);

distinguishing, in the plurality of signals, a signal from a second access point (fig.1-2, col.6, lines 30-45);

determining a signal strength of the signal from the second access point (fig.1-4, col.6, lines 30-45, col.6, line 63 to col.7, line 8, claim 1); and

providing on the access point an external indication of the signal strength that is perceptible by human being (fig.2-4, col.9, line 60 to col.10, line 44), the external indication provided directly from the first access point to the human being (fig.3-4, col.6, line 63 to col.7, line 8, and col.9, line 60 to col.10, line 13)

whereby the first access point's proximity relative to the second access point (fig.3-4, col:6, line 63 to col.7, line 8) can be estimated by the human directly from reference to the first access point without knowing the precise geographic location of the location of the second access point (fig.3-4, col.6, line 63 to col.7, line 8, and col.9, line 60 to col.10, line 13).

Regarding claim 16, Jaszewski teaches a program product for execution by a first wireless device comprising a computer readable medium having embodied therein a computer program for storing data (fig.1-4, abstract, col.3, lines 27-32), the computer program comprising:

logic operable to detect a signal from a second wireless device (fig.3-4, col.6, line 63 to col.7, line 8), distinguish that signal from other signals (fig.3-4, col.6, line 63 to col.7, line 8), and measure strength of the signal (fig.1-2, col.3, line 59 to col.4, line 25); and

logic for causing a human-perceptible external indication of the signal strength (fig.2-4, col.9, line 60 to col.10, line 44), the external indication provided directly from the first wireless device to the human being (fig.4, col.9, line 60 to col.10, line 13)

whereby the relative proximity of the access point (fig.3-4, col.6, line 63 to col.7, line 8) can be estimated by the human directly from reference to the first wireless device without knowing the precise geographic location of the access point (fig.3-4, col.6, line 63 to col.7, line 8, and col.9, line 60 to col.10, line 13).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 7, 14 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jaszewski et al. (U.S.Pat-5933420) in view of Halasz (U.S.Pat-6732163).

Regarding claim 7, Jaszewski teaches an access point operable to provide wireless network access to client devices coupled to a wireless network (fig.1-4, access point 1-4, abstract), the access point comprising:

a controller capable of automatically choosing one of a plurality of radio frequencies on which to operate (fig.2-4, col.9, line 60 to col.10, line 44), said controller choosing said frequency after evaluating frequencies on which other access points operate (fig.2-4, col.9, line 60 to col.10, line 63), said controller comprising:

Jaszewski fails to specifically disclose a. logic for picking a frequency; b. logic for transmitting on said frequency; c. logic for receiving on said frequency; d. logic for evaluating whether other access points are heard on said frequency; e. logic for reducing transmission power; f. logic for evaluating whether said other access points are still heard on said frequency; g. logic for storing the transmission power at which no other access points are heard; h. logic for picking a next frequency as the frequency and repeating steps b-g until all of the plurality of frequencies has been picked; i. logic for comparing said stored transmission powers; j. logic for choosing for operation the frequency associated with the highest stored transmission power. However, Halasz teaches a. logic for picking a frequency; b. logic for transmitting on said frequency; c. logic for receiving on said frequency; d. logic for evaluating whether other access points are heard on said frequency; e. logic for reducing transmission power; f. logic for evaluating whether said other access points are still heard on said frequency; g. logic for storing the transmission power at which no other access points are heard; h. logic for picking a next frequency as the frequency and repeating steps b-g until all of the plurality of frequencies has been picked; i. logic for comparing said stored transmission powers; j. logic for choosing for operation the frequency associated with the highest stored transmission power (fig.4, col.8, line 45 to col.9, line 48, col.10, lines 39-54). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a. logic for picking a frequency; b. logic for transmitting on said frequency; c. logic for receiving on said frequency; d. logic for evaluating whether other access points are heard on said frequency; e. logic for reducing transmission

power; f. logic for evaluating whether said other access points are still heard on said frequency; g. logic for storing the transmission power at which no other access points are heard; h. logic for picking a next frequency as the frequency and repeating steps b-g until all of the plurality of frequencies has been picked; i. logic for comparing said stored transmission powers; j. logic for choosing for operation the frequency associated with the highest stored transmission power as taught by Halasz with Jaszewski teaching in order to provide a method for selecting an operating frequency for a communication device that selects an optimal non-overlapping operating frequency.

Regarding claim 14, Jaszewski teaches a method comprising the steps of:

providing an access point operable to provide wireless network access to client devices coupled to a wireless network (fig.1-4, access point 1-4, abstract);

automatically choosing by the access point one of a plurality of radio frequencies on which to operate (fig.2-4, col.9, line 60 to col.10, line 63), after evaluating frequencies on which other access points operate (fig.2-4, col.9, line 60 to col.10, line 63), wherein the step of automatically choosing comprises the steps of:

Jaszewski fails to specifically disclose a. picking a frequency; b. transmitting on said frequency; c. receiving on said frequency; d. evaluating whether other access points are heard on said frequency; e. reducing transmission power; f. evaluating whether said other access points are still heard on said frequency; g. storing the transmission power at which no other access points are heard; h. picking a next frequency as the frequency and repeating steps b-g until all of the plurality of frequencies has been picked; i. comparing said stored transmission powers; j. choosing

for operation the frequency associated with the highest stored transmission power. However, Halasz teaches a. picking a frequency; b. transmitting on said frequency; c. receiving on said frequency; d. evaluating whether other access points are heard on said frequency; e. reducing transmission power; f. evaluating whether said other access points are still heard on said frequency; g. storing the transmission power at which no other access points are heard; h. picking a next frequency as the frequency and repeating steps b-g until all of the plurality of frequencies has been picked; i. comparing said stored transmission powers; j. choosing for operation the frequency associated with the highest stored transmission power (fig.4, col.8, line 45 to col.9, line 48, col.10, lines 39-54). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a. picking a frequency; b. transmitting on said frequency; c. receiving on said frequency; d. evaluating whether other access points are heard on said frequency; e. reducing transmission power; f. evaluating whether said other access points are still heard on said frequency; g. storing the transmission power at which no other access points are heard; h. picking a next frequency as the frequency and repeating steps b-g until all of the plurality of frequencies has been picked; i. comparing said stored transmission powers; j. choosing for operation the frequency associated with the highest stored transmission power as taught by Halasz with Jaszewski teaching in order to provide a method for selecting an operating frequency for a communication device that selects an optimal non-overlapping operating frequency.

Regarding claim 21, Jaszewski teaches a program product comprising a computer readable medium having embodied therein a computer program for storing data (fig.1-4, abstract, col.3, lines 27-32), the computer program comprising:

logic for operation in an access point (fig.1-2, col.3, line 59 to col.4, line 25), the access point operable to provide wireless network access to client devices coupled to a wireless network (fig.1-2, col.3, line 59 to col.4, line 25), the logic for automatically choosing one of a plurality of radio frequencies on which to operate (fig.2-4, col.9, line 60 to col.10, line 63), the logic choosing said frequency after evaluating frequencies on which other access points operate (fig.2-4, col.9, line 60 to col.10, line 63), the logic comprising:

Jaszewski fails to specifically disclose a. logic for picking a frequency; b. logic for transmitting on said frequency; c. logic for receiving on said frequency; d. logic for evaluating whether other access points are heard on said frequency; e. logic for reducing transmission power; f. logic for evaluating whether said other access points are still heard on said frequency; g. logic for storing the transmission power at which no other access points are heard; h. logic for picking a next frequency as the frequency and repeating steps b-g until all of the plurality of frequencies has been picked; i. logic for comparing said stored transmission powers; j. logic for choosing for operation the frequency associated with the highest stored transmission power. However, Halasz teaches a. logic for picking a frequency; b. logic for transmitting on said frequency; c. logic for receiving on said frequency; d. logic for evaluating whether other access points are heard on said frequency; e. logic for reducing transmission power; f. logic for

evaluating whether said other access points are still heard on said frequency; g. logic for storing the transmission power at which no other access points are heard; h. logic for picking a next frequency as the frequency and repeating steps b-g until all of the plurality of frequencies has been picked; i. logic for comparing said stored transmission powers; j. logic for choosing for operation the frequency associated with the highest stored transmission power (fig.4, col.8, line 45 to col.9, line 48, col.10, lines 39-54). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a. logic for picking a frequency; b. logic for transmitting on said frequency; c. logic for receiving on said frequency; d. logic for evaluating whether other access points are heard on said frequency; e. logic for reducing transmission power; f. logic for evaluating whether said other access points are still heard on said frequency; g. logic for storing the transmission power at which no other access points are heard; h. logic for picking a next frequency as the frequency and repeating steps b-g until all of the plurality of frequencies has been picked; i. logic for comparing said stored transmission powers; j. logic for choosing for operation the frequency associated with the highest stored transmission power as taught by Halasz with Jaszewski teaching in order to provide a method for selecting an operating frequency for a communication device that selects an optimal non-overlapping operating frequency.

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khai M. Nguyen whose telephone number is 571.272.7923. The examiner can normally be reached on 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on 571.272.7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Khai Nguyen
Au: 2617

9/21/2006

GEORGE ENG
SUPERVISORY PATENT EXAMINER